

this species is a very small, nodule-like supra-apertural lamella; but by no means constant, very often just a trace or entirely wanting. In its European equivalent, *V. substriata* Jeffr., this lamella is well formed and constant.

ON THE GENERIC POSITION OF *ARION FOLIOLATUS*, GOULD.

BY T. D. A. COCKERELL.

After remaining unknown and almost mythical for nearly forty years, the *Arion foliolatus* of Gould has been rediscovered by Mr. Henry Hemphill, in Washington Territory. Specimens were sent to Mr. W. G. Binney, which had been found near Gray's Harbor and at Olympia, and which are referable to two different forms, as follows:

Arion foliolatus Gould, type. One specimen agreeing with Gould's description and figure, from Olympia.

Arion foliolatus var. *hemphilli* W. G. Binney. Six specimens from Chehalis River, near Gray's Harbor. These slugs are described by Mr. Binney as "Bright yellow with bluish-black foot and edge of foot; reticulations dark reddish fawn." The genitalia also differ in some details from the type, but this may be partly due to a different degree of maturity.

Mr. Binney has kindly sent me the internal shell, genitalia, and skin of the typical example, as well as drawings of both, and copious notes, and at his request I offer a few remarks on the generic position of the species.

From the material I have examined, I should certainly have regarded the slug as a *Prophysaon* with affinities to *P. hemphilli*. But the Olympia example has lost the end of its body,¹ and the

¹ Mr. Hemphill, in his letter to Mr. Binney, relates of this example:—"When I found the specimen I noticed a constriction about one-third of the distance between the end of the tail and the mantle. I placed the specimen in a box with wet moss and leaves, where it remained for 24 hours. When I opened the box to examine the specimen I found I had two specimens instead of one. Upon examination of both I found my large *Prophysaon* had cut off his own tail, at the place where I noticed the constriction, and I was further surprised to find the severed tail piece possessed as much vitality as the other part of the animal. The ends of both parts at the point of separation were drawn in as if they were undergoing a healing process." When the box containing the slug reached Mr. Binney, the tail-piece was decomposed.

special generic character, the caudal mucus pore, is lost. This, however, undoubtedly existed, for it is indicated in Gould's description, and Mr. Binney informs me that it is present in the examples of var. *hemphilli* from the banks of Chehalis River. Hence the slug cannot be a *Prophysaon*, and the question arises, is it an *Arion*? From the peculiar reticulation, the position of the genital orifice, the shape of the penis-sac, and the general character of all its parts, I think we may safely say that it cannot be placed in *Arion*, nor does it agree with any other described genus. We have therefore no option but to propose a new generic name for it.

*Phenacarion*¹ n. g.

Animal limaciform, tapering, resembling a *Prophysaon*, but possessing a caudal mucus pore or pit. Respiratory orifice on right anterior side of mantle, about one-third of its length from the anterior border. The mantle conceals a thin and subrudimentary calcareous plate, easily fractured. The sole is not differentiated into parts. Genital orifice behind right tentacle. Jaw with numerous ribs. Penis sac elongate, cylindrical, thick, not tapering.

The mantle of *Phenacarion foliolatus* is quite long, with the shell situated near the respiratory orifice. There are black markings and spots as figured by Gould. The body has large elongate or irregular reticulations, the interspaces being minutely reticulated to give the foliated effect on which the specific name was based. The edge of the foot has dark transverse lines, alternating with paler lines, much as in *Arion ater*. The sole is transversely and somewhat obliquely grooved, but there is no separate locomotive disc. The jaw has about 23 ribs, denticulating either margin. The genitalia are much like *Prophysaon*, and decidedly different from *Arion*. The testicle (ovotestis) is somewhat subdivided. The vas deferens enters at the end of the penis sac.

Mr. Binney's notes concerning the typical *P. foliolatus* give "general color of animal reddish-fawn, also of reticulations. On the lower edge of the mantle, along the back from end of mantle to tail, and above the edge of the foot, is a lighter band, and also on top of neck almost to base of tentacles. The light band on edge of mantle is irregularly speckled with reddish dots. Mantle minutely tuberculated. The oblique perpendicular lines on edge of foot alternate wide and narrow."

¹ phénax—an impostor; *Arion*.

Phenacarion might almost be a variety of *Prophysaon hemphilli*, except for the generic character. Possibly Prof. E. D. Cope would regard this as an instance of "the same specific form" existing "though a succession of genera," which he has regarded as probable in his "Origin of the Fittest" (quoted by Wallace, "Darwinism," p. 421). Indeed, it not very rarely happens that almost the only difference between two species is a generic one. Good instances of this are afforded among the *Hymenoptera*, e. g., the resemblance of *Vipio coloradensis* Ashm., to *Agathis vulgaris* Cress., is almost exact on superficial examination. Except the generic and family characters, the *Agathis* is only a little larger with entirely fuscous wings, and the posterior femora and tibiæ mostly orange—peculiarities which might elsewhere be varietal only.

NOTE.—Mr. Cockerell writes me that he now regards *Phenacarion* as a subgenus of *Prophysaon*.—Ed.

A FEW LAST WORDS ON CREPIDULA.

BY JOHN FORD.

In my article on *Crepidula* published in the 8th number of the NAUTILUS, I endeavored to show that the shells described by Say as *C. glauca* were altogether distinct from the *C. fornicata* of Linné, and therefore the name should have been retained in Bulletin No. 30 of the National Museum recently published by Dr. Dall, instead of discarded. As in the following number their distinctness from *fornicata* was acknowledged by Dr. Dall, no further evidence seems necessary to sustain it.

The assertion by him however in the same issue, that the series of shells presented by me to the National Museum under the name of *C. glauca* "are distinct from *C. fornicata* but that they do not show the characters called for by Say's description," does, perhaps, challenge further remark; since it appears to be partly correct and partly conjectural. They are certainly not *C. fornicata*, but they as certainly do embody every character called for by Say's description of the true *C. glauca* written in 1821-2, and published in Vol. 2, Journal of the Academy of Natural Sciences of Philadelphia; also in Say's Conchology of the United States.